

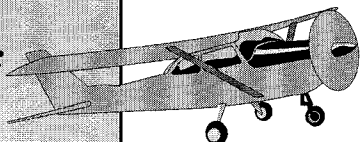
Aviation Education News



Distributed Quarterly to Promote Aviation Education and Awareness in Virginia

February 1999

In this Issue:



Averett College Flight Team Wins Regional Competition

**Averett College Flight
Team Wins Regional
Competition** **Page 1**

President's Notes **Page 2**

**Exploring Aeronautics
CD-ROM** **Page 3**

Space Day 1999 **Page 3**

NIFA **Page 4**

**Hampton University
Wins "Top Pilot"** **Page 4**

**EAA Summer Aviation
Camp Schedule
Expanded** **Page 5**

**Aviation Education
Corner** **Page 6**

Amazing Space **Page 7**

**Aviation and Space
Web Sites** **Page 7**

Calendar of Events **Page 8**

The Averett College flight team, The Flying Cougars, captured their fifth National Intercollegiate Flying Association Region X SAFECON championship in the past six years, November 5-7 in Williamsburg. The competition involved both ground and flying events totaling nine different areas of competition. Averett won overall in both the ground events and flight events in the Region X competition.

Region X consists of the states of South Carolina, North Carolina, Virginia, Maryland, and the District of Columbia. Averett competed against Norfolk State University, Hampton University, Guilford Technical Community College, Caldwell Community College, and the U. S. Naval Academy. Averett's win qualifies them to compete in the national SAFECON to be held in Salina, Kansas in April. The national event will feature the top 30 collegiate teams in the country including the U. S Air Force Academy.

Many of the Flying Cougars also won individual awards ranging from first place to tenth place in a particular event. The flight team members are: Team Captain Chad Ochs of Ephrata, PA; Paula Blanton of Glen Allen; Tiffany Shelton of Newport News; Laura Vollersten of Parthenon, AZ; Jonathan Battalie of Midlothian; Bruce Hartt of Annapolis, MD; Chang-Chi Hsiao of Taipei, Taiwan; Donald Sweeney of Greensboro, NC; Trevor Varner of Barboursville; Ian Kelley of Portsmouth; Robert Laskowski of Shelton, CT; Toby Markham of Bedford; John Shumate of Fairfax; Coach Robin Koepenick of Danville; Coach Chris Stork of Danville; Faculty Advisor Edward Vance of Danville; and Faculty Advisor David Ruev of Danville.

Averett's Department of Aviation, which was founded in 1980, offers bachelors degrees in three areas of concentration: business administration and aviation management, aviation/criminal justice, or airway science management. Students attend classes on the college's main campus in Danville and at the college's aviation facility housed at the Danville Regional Airport. Students train on single-engine and multi-engine aircraft. A twin engine simulator with three-axis plotter and visual system is also available for instructional use.

For more information about the college's Department of Aviation contact David Ruev at (804) 791-5615 or e-mail: druev@averett.edu.

For more information about Averett College, call 1-800-AVERETT or visit the College's World Wide Web Site: <http://www.averett.edu>.

From Averett College press release dated November 16, 1998.

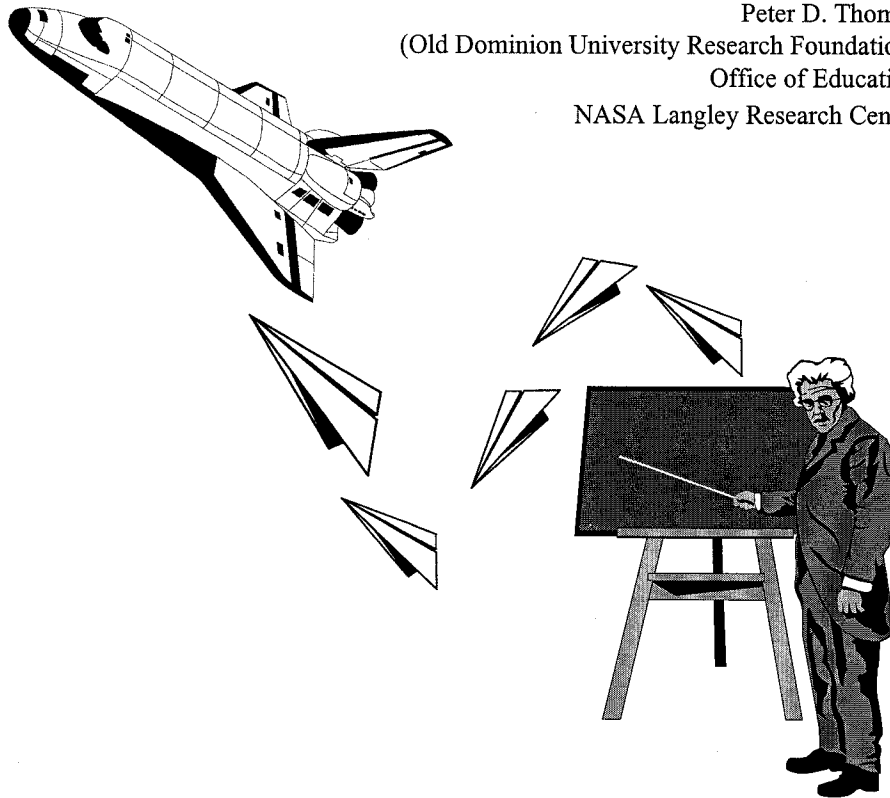
For more NIFA information see page 4

PRESIDENT'S NOTES:

Each summer NASA Education Workshops (NEW) model the integration of the national standards in mathematics, science, and technology. Educators will be provided with an opportunity to observe NASA's state-of-the-art research and development through direct interaction with NASA scientists, engineers, technicians and educational specialists at a NASA Field Center. There will be twenty workshops nation wide, offered at the ten NASA centers. These teacher workshops are designed for K-12. The due date for an application submission is February 20, 1999. The application is available on-line at <http://www.nsta.org/programs/new.htm> or e-mail: nem-request@nsta.org; or by fax: 703-522-5413; or Fax-on-demand: 1-888-400-6782, document #581. Selected applicants will spend two weeks in the summer at one of NASA's Centers. Travel, housing, and meal expenses are provided by NASA. Graduate credit is available. The two-week workshops occur during mid-June through mid-August. Participants are notified by April 15th of their NASA Center assignments and dates.

I will be conducting a K-6 workshop, formerly called NEWEST, as part of the above program selections. It will be held here at NASA Langley June 20th - July 3rd. We are also offering for Preservice teachers, through Norfolk State University 3-two week hands-on workshops for these budding teachers who will be in the classroom the following year. These programs are coordinated through NASA Langley University Programs.

Peter D. Thomas
(Old Dominion University Research Foundation)
Office of Education
NASA Langley Research Center



VASEF AVIATION EDUCATION NEWS
is published quarterly in support of aviation education in the Commonwealth of Virginia by the Virginia Department of Aviation

VASEF BOARD

Peter D. Thomas, President
(NASA)

Betty Wilson, Secretary
(Virginia Department of Aviation)

Tom Tyndall, Treasurer
(Henrico County Public Schools)

Bryan Elliott, Member
(Charlottesville-Albemarle Airport)

David Ruev, Member
(Averett College)

Jack Simons, Member
(Experimental Aircraft Association)

Darryl Stubbs, Member
(Norfolk State University)

Tom Jones, Member
(Richmond FSDO)

John Yeck, Member
(Federal Aviation Administration)

Vernon Wildy, Member
(Virginia Department of Education)

VASEF NEWS Editor: Betty Wilson


Please send story ideas, photographs, calendar events, and other items for possible inclusion to:

Betty Wilson
Virginia Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250-2422
(804) 225-3783
(804) 236-3635 (FAX)
wilson@doav.state.va.us (E-mail)
<http://www.doav.state.va.us> (Internet)



VASEF PURPOSE

The Forum is a non-profit organization to promote and foster aviation and space education among public and private schools, colleges and universities, and community and civic groups, and to promote increased public understanding of aviation and space and their economic, social, and career values in our society and in the Commonwealth of Virginia.



EXPLORING AERONAUTICS

Educational Product
Teachers Grades 5-8

Developed by
The National Aeronautics and Space Administration.

New NASA Aeronautics CD-ROM for Teachers

A new Aeronautics CD-ROM has been designed for students in grades 5-8.

Produced at the NASA Ames Research Center, this exciting educational CD-ROM offers an introduction to aeronautics, covers the fundamentals of flight, contains an historical timeline, examines different types of aircraft and teaches students to use the tools of aeronautics used by researchers to test aircraft designs. This teacher-paced software includes lively animations, QuickTime movies and student activities promoting the use of the scientific method in the world of aeronautics.

Also included on the CD-ROM are extensive support materials for printing.

Part 1 is a Science of Flight Instructional Unit. It includes content, experiments, worksheets, and quizzes (with answer sheets provided). *322 pages*

Part 2 is called Integrating with Aeronautics. It has extensive information and activities showing how aeronautics can be integrated into Language Arts, Social Studies, and Mathematics. *199 pages*

Part 3 is the Multimedia CD-ROM and Student Logbook section. It explains the interactive parts of the CD-ROM and has many supporting activities. *96 pages*

Part 4 is a Supplemental Literature Unit called "Countdown to Flight". *77 pages*

Part 5 is a Supplemental Literature Unit called "Aircraft Types". *113 pages*

Part 6 is a Supplemental Literature Unit called "Regimes of Flight". *56 pages*

Absolutely everything has been thought of and included in this CD. No assumption of previous knowledge is

made of the teacher. All the concepts, history, and scientific principles are clearly explained in special text areas. Activities are clearly explained and worksheets are ready to be photocopied for distribution to students. Many lessons are independent so a teacher can skip around picking certain activities to complete.

This software really has to be seen to be believed and the best part is that it can be obtained through the NASA CORE (Central Operation of Resources for Educators) Catalog for only **\$5.00**.

If you already have a catalog (and order blank) request: **Exploring Aeronautics CD-ROM** (Item # 400.0-91).

The mailing address is:

NASA CORE

Lorain County Joint Vocational School
15181 Route 58 South
Oberlin, Ohio 44074

E-Mail: nasaco@leeca.esu.k12.oh.us

Web: [Http://spacelink.nasa.gov/CORE](http://spacelink.nasa.gov/CORE)

For more information see page 6.

Space Day 1999

It's not too early to start planning for Space Day 1999 which is scheduled for May 6.

If you need some ideas, check out the Space Day web site. It's broken down into 5 different sections:

- The **first** explains what Space Day is.
- The **second** has ideas for planning your Space Day.
- The **third** has all sorts of fun space-related activities that can be used anytime.
- The **fourth** is a teachers area with lesson plans and helpful links.
- The **fifth** is an area for communicating with Friends of Space Day.

www.spaceday.com

What is NIFA?

NIFA stands for the National Intercollegiate Flying Association. It is an association of colleges and universities that either are directly involved in aviation education or who have a student group on campus with aviation interests.

Mission Statement:

"The National Intercollegiate Flying Association was formed for the purposes of developing and advancing aviation education; to promote, encourage, and foster safety in aviation; to promote and foster communications and cooperation between aviation students, educators, educational institutions and the aviation industry; and to provide an arena for collegiate aviation competition."

NIFA's primary activity is conducting regional and national flying contests or SAFECONs (Safety and Flight Evaluation Conferences). Over sixty-five schools compete in regional competitions each year. Those who qualify advance to the National SAFECON where a National Champion is crowned.

SAFECONs consist of both ground and flying events. Ground events may include: computer accuracy event, ground trainer event, aircraft preflight inspection event, aircraft recognition event, simulated comprehensive aircraft navigation event, electronic flight computer event, and IFR simulated flight event.

Flight events may include: power off landing event, short field approach and landing event, navigation event, message drop event, and IFR precision flight event.

Schools earn points for each event. The one which ends up with the highest cumulative score after all of the events have been completed becomes the national champion.

The national SAFECON for 1999 will be held April 26-May in Salina, Kansas with Kansas State University acting as the host school.

Norfolk State University Wins "Top Pilot" in National Intercollegiate Flying Association (NIFA) Region Ten, 1998-1999 Competition

A member of the Norfolk State University Flight Team, Barbara Nesbitt, won the "top pilot" award at the NIFA Region Ten competition held at Williamsburg/Jamestown Airport on November 6 and 7, 1998.

This is the first time a female has won "top pilot" in Region Ten. Barbara took "top honors" by winning the highest total combined points in pilot related events including: short field landings, power-off landings, cross country navigation, simulator, preflight and a navigation comprehensive examination.

Based on their performance at this competition, Barbara and the rest of the Norfolk State University Flight Team have been invited to attend the NIFA National competition to be held at Kansas State University this spring.



The NSU Flight Team

Names:

L to R first row, Rafael Duyos, Barbara Nesbitt, Jeff Alston

L to R top row, Everett Watson, Mike Everage, Bob Null, Jay Laughmiller, Tony Bonanno, Mike Evans

National Air and Space Museum Calendar

Wednesday, February 17, 1999

Curator's Choice

George Carruthers and the Apollo Lunar Observatory

Join Curator David DeVorkin to learn about George Carruthers and his contributions to the Space Program. Visitors should meet David at the Gold Seal in the Milestones of Flight Gallery at 12:00 p.m.

Wednesday, February 24, 1999

Curator's Choice

Guy Bluford and the Changing Astronaut Corps

Join Curator Cathy Lewis as she talks about the first African American in space. Visitors should meet Cathy at the Gold Seal in the Milestones of Flight Gallery at 12:00 p.m.

Saturday, February 27, 1999

Monthly Star Lecture

The Circle of Animals -- Tales of the Zodiac

The apparent motion of the Sun, Moon, and the bright planets through our sky is confined to a band now marked by images from ancient imaginations -- the twelve constellations of the Zodiac. How did this system come to be? Join staff astronomer, Sean O'Brien, for some clues. The sights of upcoming March evenings are also examined. 6:00 p.m. in the Albert Einstein Planetarium.

Saturday, February 27, 1999

Aerobatic Flying Patty Wagstaff Style

Patty Wagstaff will discuss her career in aviation as an Aerobatic pilot, as well as her off-season flying where she teaches a warbird-based spin and unusual attitude recover course in AT-6's and T-28's. In addition, she also flies as a stunt pilot for major motion picture and television projects. After the lecture, she will sign copies of her new book, "Fire and Air: A Life on the Edge". To reserve your free tickets, please call (202) 357-3762. 8:00 p.m. in the Langley Theater.

Thursday, March 25, 1999

General Electric Aviation Lecture Series:

Gary Larkins "Lost Wings"

7:30 p.m.

March - June, 1999

Exploring Space Lecture Series

"Observing at the Edge of the Universe"

One lecture will be held each month.

Planetarium Feature:

"And A Star to Steer Here By"

Also Showing:

"Sky Quest" and "The Stars Tonight"

Paul E. Garber Preservation, Restoration, and Storage Facility

Get a behind-the-scenes look at the restoration workshop in Suitland, Maryland, where skilled craftsmen restore aircraft, satellites, and flight-related artifacts. Free tours last approximately three hours.

10:00 a.m., Monday through Friday; 10:00 a.m. and 1:00 p.m. Saturday and Sunday. For reservations, call (202) 357-1400 (voice) or (202) 357-1505 (TTY).

For general information call (202) 357-2700 (voice) or (202) 357-1729 (TTY).

EAA SUMMER AVIATION CAMP SCHEDULE EXPANDED

The dream of flight will come to life for young people through specialized youth aviation programs presented as part of the EAA Aviation Foundation's Air Academy 1999 summer programs.

This year's programs will include a mix of aviation and recreational activities for ages 12-18, divided into sessions according to age group. In addition, the Foundation offers work experience and internship programs for young people and educators.

This year, all education programs will reside in the new Air Academy Lodge, adjacent to the EAA Aviation Center. This complete accommodation and dining facility allows participants to enjoy a complete aviation experience, with access to all of EAA's resources.

"This ambitious schedule of education programs for 1999 have all been brought under the name 'EAA Air Academy,' which we believe defines the varied programs for aviation enthusiasts of all ages," said Foundation President Tom Poberezny. "These programs underscore one of the primary missions of the EAA Aviation Foundation -- trying to open the world of aviation to anyone who wants to discover more about it."

Three of these programs are residence camps based at the EAA Aviation Center in Oshkosh, Wisconsin. Each will utilize the resources of the world's premier recreational aviation organization. The scheduled programs include:

EAA Aviation Fun Camp (June 5-10, June 12-17 and June 19-24) are week-long programs designed to help kids 12-14 years old to explore the world of flight with a balanced mix of aviation studies and aviation-based recreational activities.

EAA Aviation Experience Camp (June 26-July 1 and July 6-11) offers 14 and 15-year-olds a unique "fun and discovery" learning experience with hands-on instruction and supervision in fundamental aviation building skills.

EAA Aviation Leadership Camp (July 13-18 or July 21-August 1) continues the exciting summer aviation experiences for 15-17-year-olds that began in 1984. The Air Academy is an intensive look inside the world of flight, with hands-on experience in numerous building skills. The two-week session (July 21-Aug. 1) concludes with involvement in the annual EAA AirVenture Oshkosh, the world's premier aviation event.

EAA Air Academy internship programs for young people and adults offer opportunities to develop aviation skills while also using their talents in other areas. They include:

The Cliff Robertson Airport Work Experience Program, an eight-week summer work experience for two young people and a young flight instructor/mentor. The program allows participants to work in an airport setting while obtaining flight instruction. The instructor/mentor has an opportunity to develop instructional skills in an aviation-rich environment.

The Doolittle Raiders Internship provides a young certified flight instructor with summer work experience in support of the summer Air Academy, coordinating flight instruction and orientation flights for participants.

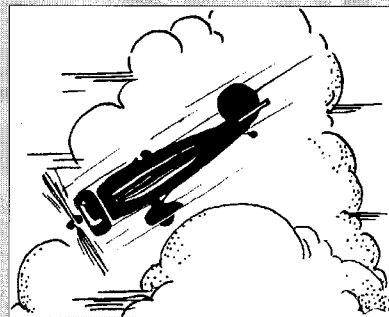
The Sandberg/Petron Summer Internship offers aspiring aviation maintenance technicians an opportunity to develop their skills at EAA's Kermit Weeks Flight Research Center in Oshkosh.

The Wittman Aviation Studies Grant provides the opportunity each summer to process and document the EAA Aviation Foundation's Wittman Collection while working and living at the Air Academy Lodge.

The Timken Aviation Studies Grant is a summer position supporting documentation of women's roles in aviation, also while working and living at the Air Academy Lodge.

For more information or registration materials for the Foundation's education programs, call toll free 888-EAA-EAA9 or 920-426-6815. You may also write to the EAA Aviation Foundation Education

Office, P. O. Box 3065, Oshkosh, Wisconsin 54903-3065, or contact EAA's World Wide Web site at www.eaa.org. You may also e-mail the Education Office directly at education@eaa.org.



VIRGINIA AVIATION MUSEUM CALENDAR

February 18, 1999

Guest Speakers Series

Eric Briggs, deputy director of the Department of Defense, discusses flying Navy fighters -- from the Vietnam War to the Gulf War.

March 13, 1999

Ultralight Safety Seminar

If you fly ultralights or have dreamed of flying one, hear from the experts about safety techniques, maintenance and other concerns. Co-sponsored by the Virginia Department of Aviation. For more information call (804) 236-3637.

March 16, 1999

EAA Safety Seminar

Call (804) 222-7497 for more information.

March 18, 1999

Guest Speakers Series

Speaker TBA

Guest Speakers Series Programs begin at 7:00 p.m. in the Benn Theater. Please call (804) 236-3622 to confirm date and time.

The Virginia Aviation Museum is open daily from 9:30 a.m. to 5:00 p.m. Admission is \$5.00 for adults, \$4.00 for seniors and \$3.00 for youth. It is located at Richmond International Airport, 5701 Huntsman Road, Richmond International Airport, Virginia 23250. For further information on events and schedules, call (804) 236-3622.


Aviation Education Corner

Balloon Thrust Experiment

This experiment was copied from the "Exploring Aeronautics" CD-ROM developed by the National Aeronautics and Space Administration (NASA). (See page 3 of this newsletter).

This particular experiment, taken from Chapter 1, "The Science of Flight," utilizes the Scientific Method to help students discover "How is it that an airplane can move forward?" Additional information supporting this experiment can be found in the text including the Student Reading on Newton's Third Law.

In future editions of the VASEF Newsletter other experiments from the CD-ROM will appear. These materials are geared for students from grades 5-8 but you may use them as you see fit.



Part 1The Science of Flight

1. Teacher - Led Experiment

Balloon Thrust – Procedure Card

After introducing the Scientific Method, the teacher can walk the students through this simple experiment to help them become accustomed to using the Method.

Lead the students through a discussion of everyday things they have observed and then wondered why they happened. Use the template on the following pages as a guide.

- For example a question might be:
"How is it that an airplane can move forward?"
- Next, field predictions from the students of what the answer might be:
"Air coming out the back end pushes it forward."
"The engines make it go."
- Ask students to propose steps for an experiment to prove or disprove their hypothesis. Lead them towards the Balloon Thrust Experiment. Explain to the students what steps you will perform and then have them assist you in creating the procedure and the materials list.
- Follow the procedure and ask students to observe carefully with all of their senses.
- Get ideas from the students on how to organize the data: graph, chart, drawing, etc.
- Ask each student to write their own conclusion.
- Share and discuss their conclusions.
- Distribute the Student Reading: Newton's Third Law and read it to them, discussing it as you go.
- Ask them to rewrite their conclusion based upon this new information.
- Show them the conclusion given in the Experiment Log Key and ask the students to carefully compare what they wrote to what is given in the Key. Ask them to identify ideas that are missing in their conclusions. Save this work for future comparison.

Part 1The Science of Flight

2. Experiment Log – Key

Page 1

Experiment: Balloon Thrust

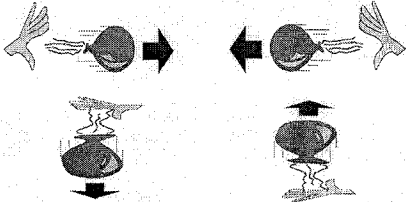
Steps	Data
<div>1. <u>State the problem.</u></div> <div>QUESTION</div> <div>(What do I want to know?)</div>	<div>How is it that an airplane can move forward?</div>
<div>2. <u>Form a hypothesis.</u></div> <div>PREDICTION</div> <div>(What do I think is going to happen?)</div>	<div>Examples:</div> <div>- Air comes out the back end and pushes it forward.</div> <div>- Air blows out one way and the aircraft moves the opposite way.</div>
<div>3. <u>Design an experiment.</u></div> <div>MATERIALS & PROCEDURES</div> <div>(What steps will I take to do this experiment? What things will I need?)</div>	<div>Materials: Balloon</div> <div>Procedure</div> <div>1. Gather materials.</div> <div>2. Blow up balloon and hold tightly (do not tie a knot).</div> <div>3. Hold in midair with the mouth of the balloon facing left, so it's parallel with the ground.</div> <div>4. Let go of balloon and observe.</div> <div>5. Repeat steps 2-4, but have mouth of balloon facing to the right.</div> <div>6. Repeat steps 2-4, but have mouth of balloon facing up.</div> <div>7. Repeat steps 2-4, but have mouth of balloon on the ground.</div>

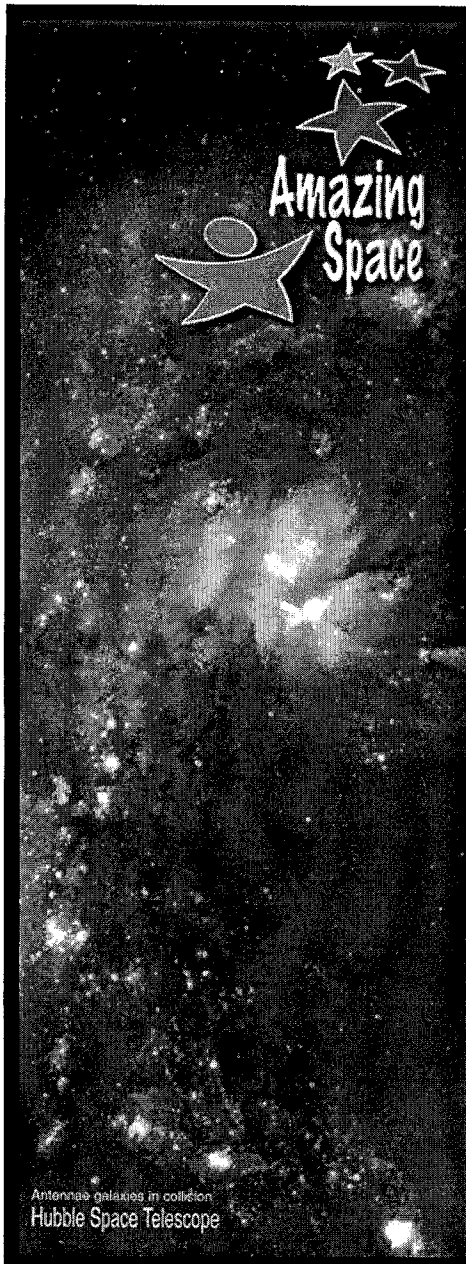
Part 1The Science of Flight

3. Experiment Log – Key

Page 2

Experiment: Balloon Thrust

Steps	Data
<div>4. <u>Perform the experiment.</u></div> <div>OBSERVE and RECORD DATA</div> <div>(What information did I gather during this experiment?)</div>	<div>The first time the balloon traveled quickly to the right and then it went up and did some loops before it ran out of air.</div> <div>The second time the balloon traveled quickly left for a bit before shooting downward in a loop and hitting the ground.</div> <div>The third time the balloon went nearly straight down quickly into the ground where it ran out of air.</div> <div>The fourth time the balloon shot up nearly straight up into the air and did some loops before it ran out of air and fell to the ground.</div>
<div>5. <u>Organize and analyze data.</u></div> <div>(Make a graph, chart, picture or diagram.)</div>	<div></div>
<div>6. <u>Draw conclusions.</u></div> <div>(What do my results mean? Was my hypothesis right or wrong? Can I explain why?)</div>	<div>Each time the balloon was released, it immediately traveled in the direction opposite the way the mouth was pointed. For example, when the mouth was pointing to the left, the balloon went to the right. After that, the balloon kind of traveled in the direction opposite where the mouth of the balloon was pointing.</div> <div>The air rushing quickly out of the mouth of the balloon must push the balloon forward. That means the air rushing out is the thrust that gives the balloon its forward motion. Newton's Third Law says that for every action there is an equal and opposite reaction. The action is the air coming out of the mouth of the balloon. The reaction is when the balloon travels in the direction opposite to where the mouth is pointing. The second hypothesis is correct. An airplane works like a balloon. When the engines blow the air out one way, the airplane goes the opposite way.</div>



Amazing Space

Amazing things are discovered each day. Mysterious black holes. Exploding stars. Ancient galaxies. Textbooks simply can't keep up with the pace of Astronomical discovery.

With Amazing Space, a new on-line educational tool that features stunning imagery by the Hubble Space Telescope, you can bring the farthest reaches of the universe into your classroom and stay light-years ahead of more traditional teaching methods. These interactive laboratories put the universe literally at your fingertips.

So don't read about math and science. Do it the interactive way. Visit Amazing Space today!

www.stsci.edu/amazing-space

Amazing Space is brought to you by teachers and the people who operate the Hubble Space Telescope.

Antennae galaxies in collision
Hubble Space Telescope

STScI M3-99-01

SCIENCE MUSEUM OF VIRGINIA CALENDAR

Ethyl UNIVERSE Planetarium and Space Theater reopens in late February.

IMAX FILMS:

WHALES

GRAND CANYON: THE HIDDEN SECRETS
ROLLING STONES "AT THE MAX"

PLANETARIUM SHOW:

NIGHT SKY

LIVESKY: Informal "live" planetarium presentation of the month's celestial events. Third Friday of every month beginning in March.

SKYWATCH: Third Friday of every month (weather permitting) on the front lawn.

24-Hour Information: (804) 367-0000

Box Office: (804) 367-1080

24-Hour Skywatch Information: (804) 367-8277

24-Hour TDD Information: (804) 367-9760

General Information - TDD: (804) 367-6552

Group Scheduling: (804) 367-6552

Home Page: <http://www.smv.mus.va.us>

VIRGINIA AIR AND SPACE CENTER CALENDAR

VISITING EXHIBITS:

WHAT MAKES MUSIC? thru May 9

IMAX FILMS:

L-5: FIRST CITY IN SPACE thru April 1

SPECIAL EFFECTS thru April 1

ALASKA: SPIRIT OF THE WILD thru February 11

GRAND CANYON thru April 1

SPRING BREAK SCIENCE CAMPS

Living in Space - Space Station Bound:

April 6 and 7

All Us Robots: April 8 and 9

SIGMA SERIES LECTURES

Acoustical Research in Bowed String Musical Instruments presented by Carleen Hutchins, March 2, 1999 at 7:30 p.m.

Call (804) 727-0900 for show times

Visit the Center's Home Page:

<http://www.vasc.org>

Visit the Teacher Resource Center Home Page:

<http://seastar.vasc.mus.va.us>

Aviation & Space



Web Sites

Averett College

<http://www.averett.edu>

Exploring Aeronautics
(NASA CD-ROM)

<http://exploringspace.arc.nasa.gov/aero/aero.htm>

NASA CORE

<http://spacelink.nasa.gov/CORE>

Space Day

<http://www.spaceday.com/>

NIFA

<http://www.deltast.edu/academics/bus/nifa/index.htm>

Experimental Aircraft Association

<http://www.eaa.org>

Amazing Space

<http://stsci.edu/amazing-space>

Calendar of Events

- February 5, 1999

Deadline for Entries to the 1999 International Aviation Art Contest. Virginia entries should be sent to the Virginia Department of Aviation, c/o Betty Wilson, 5702 Gulfstream Road, Richmond, Virginia 23250-2422.
- February 16, 1999

Deadline for Entries to the 1999 VAOC Scholarship Award Program (must be postmarked not later than this date). Applications should be sent to the Virginia Department of Aviation, c/o Betty Wilson, 5702 Gulfstream Road, Richmond, Virginia 23250-2422.
- April 7-11, 1999

National Congress on Aviation and Space Education (NCASE'99) sponsored by the Civil Air Patrol (CAP) will take place at the Omni Rosen Hotel in Orlando, Florida. Hands-workshops, first-rate speakers on aviation and education, networking, Kennedy Space Center and Sun N' Fun fly-in. Teachers from all grade levels and subject areas are invited. For more information contact CAP Headquarters, Aerospace Education and Training, 105 S. Hansell St. Bldg. 714, Maxwell AFB, AL 36112-6332 or check out the CAP Web site at www.cap.af.mil.
- April 8-10, 1999

Spring Spectacular, Hot Air Balloon Festival and Airshow will be held at the Suffolk Municipal Airport from 9:00 a.m. -10:00 p.m. Hot air balloons, air show, arts and crafts, carnival, midway, nationally known entertainment, etc. For more information contact Joe Love at (757) 539-8295, (757) 538-0240 (fax), or e-mail: sfajlove@erols.com.

Aviation Education Supporters:

VASEF projects are funded by our membership fees and by donations from our member organizations. We would appreciate your support through membership in our organization.

Regular Membership \$25.00 annually (July - Dec. \$12.50)

Non-Profit Organization \$25.00 annually (July - Dec. \$12.50)

Corporate Membership \$100.00 annually (July - Dec. \$50.00)

New Member

Renewal

Date:

Name:

Name of Organization:

Occupation:

Address:

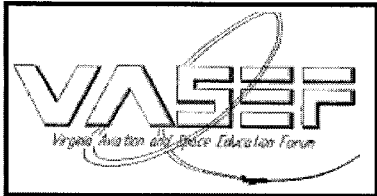
City:StateZip

Telephone

Please Return to: Tom Tyndall, VASEF Treasurer

5702 Gulfstream Road

Richmond, Virginia 23250-2422



VASEF Aviation Education News
5702 Gulfstream Road
Richmond, Virginia 23250-2422

Bulk Rate
U.S. POSTAGE
PAID
Richmond, Va
Permit No. 949

Inside:
Aeronautics Curriculum for Grades 5-8
Integrating Aeronautics into Language Arts,
Social Studies, Science, and Mathematics.



New NASA CD-ROM

Please Post for Teachers